

243 H. ABSTRACT OF THE DISCLOSURE

244 Emulsified liquid shortening compositions comprising dietary fiber gel, water and lipid, as  
245 well as a method for making the compositions, are disclosed. According to the present invention,  
246 dietary fiber gel can be subjected to micro-particulation by high shear via homogenization and  
247 combined with water and lipid. These ingredients are mixed to form a mixture. The mixture can  
248 then be subjected to colloid milling or other equivalent methods of emulsification, for example  
249 homogenization and ultrasonification treatment, in the presence of food grade emulsifiers, for  
250 example lecithin, and the emulsified mixture can be pasteurized. Functional foods such as high  
251 omega three and omega six oils and pure omega three and omega six fatty acids, medium chain  
252 triglyceride, beta carotene, calcium estearate, vitamin E, bioflavonoids, fagopyritrol, polyphenolic  
253 antioxidants of vegetable origin, lycopene, luteine and soluble fiber, for example Beta-Glucan  
254 derived from yeast, and other soluble fibers derived from grain, flax seed, and other vegetable and  
255 fruit fiber sources can be added prior to mixing for additional health benefits. The compositions are  
256 suitable for use in formulated foods to replace all or a portion of fats, oils and liquid shortenings  
257 normally contained in the foods to yield lower calorie, lower fat formulations of the foods. The  
258 emulsified compositions can also be used on a prorated basis as a vector for the introduction of  
259 dietary fiber gels into formulated foods to partially and totally replace other hydrocolloids normally  
260 found in formulated foods, thus providing an effective means to reduce production costs of  
261 formulated foods.